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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,458	03/25/2004	Antoine Paturle	033818-102	4854
21839	7590	04/18/2006	EXAMINER	
BUCHANAN INGERSOLL PC (INCLUDING BURNS, DOANE, SWECKER & MATHIS) POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404				KNABLE, GEOFFREY L
		ART UNIT		PAPER NUMBER
		1733		

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/808,458	PATURLE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Geoffrey L. Knable	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) \_\_\_\_ is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_.

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9, drawn to a tire, classified in class 152, subclass 524.
- II. Claims 10-15, drawn to a method for obtaining a design on an article, classified in class 264, subclass 293.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the process as claimed can be used to make another materially different product such as a rubber conveyor belt and further the product as claimed could be made by another materially different process such as etching or using an embossing roller.

3. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Alan Kopecki on April 13, 2006 a provisional election was made with traverse to prosecute the invention of group I, claims 1-9. Affirmation of this election must be made by applicant in replying to this Office action. Claims 10-15 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-5, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazaki et al. (US 6,235,376) or Hinks et al. (US 4,625,101) taken in view of at least one of [Antes (US 5,059,776), Doner (US 1,354,471) and Wood (US 3,516,730)] and further in view of Egan et al. (US 4,444,713).

Displaying various types of information on external tire surfaces using molding, stamping, labels, etc. is well known in this art - e.g. note col. 1 of Miyazaki et al. as well as Hinks et al. Inclusion of a design having ridges/grooves that define a diffraction grating is not however shown.

Antes indicates that it is desirable to form bar codes including bar code labels using microscopic periodic relief structures in the form of diffraction gratings (e.g. col. 6, lines 32-36), this enabling additional security features. Doner and Wood further evidence the known use of diffraction gratings to yield a desired design of various types on a substrate surface, it being noted that Doner indicates that this allows colored designs to be produced without using colored paints, pigments, etc. while Wood suggests gratings as self adhesive structures. Egan et al., also directed to patterning tires in particular, indicates an understanding in the tire art that producing a desired pattern by varying surface finishes (i.e. essentially microscopic patterning) provides numerous advantages including the ability to pattern without using colored compounds as well as providing a smooth sidewall surface, less mold release problems, reduced stress points, etc. (esp. col. 4, lines 1+). Although Egan et al. does not specifically suggest providing a diffraction grating pattern, the surface finishes discussed are considered very analogous to those produced by the diffraction gratings (i.e. both resulting from essentially microscopic patterning) and thus would be instructive to the artisan in adapting or adopting diffraction gratings in tires. In view of these teachings, given the well known nature of various designs and labels on tires, it is considered to have been obvious to adopt of adapt ridges/grooves sized to form diffraction gratings to achieve the desired design with an expectation of either being able to enhance security (in the context of bar code labels) or avoid the need for additional coloring agents, this further reasonably being expected to provide essentially the same advantages discussed and taught by Egan as noted above. It is additionally noted that although in

some cases, a base underlying a tire design or barcode might include colorants other than black, the claim 1 reference to a black color does not exclude the design being underlined by a non-black color (note the claim reference to "black color" only defines materials that the tire is made of or colors that are displayed by the grating, *not* that the actual grooves/ridges are in the black colored surface). In any event, it also would seem obvious from the cited art to utilize diffraction gratings regardless of the underlying color for only the expected results, i.e. the higher the reflectivity, the more visible the patterning - note also that Hinks et al. would seem to suggest barcodes suitable and effectively molded in the black sidewall directly while Egan et al. would provide a reasonable expectation that microscopic patterning would suitably be able to pattern a black sidewall.

As to claim 2-3, the suggestion in each of the references for diffraction gratings that display optical effects is considered to render the claimed values obvious, it being considered that the artisan would have been readily and routinely able to optimize the dimensions to yield the desired results, it being submitted that the effects/designs of diffraction gratings are very well understood. As to claims 4-5, each of the secondary references would suggest varying orientations of striations to yield desired patterning. As to claims 7 and 8, omitting such materials on a microscopically patterned sidewall would have been obvious in view of col. 3, lines 19-23 of Egan et al.

9. Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazaki et al. (US 6,235,376) or Hinks et al. (US 4,625,101) taken in view of at least one of [Antes (US 5,059,776), Doner (US 1,354,471) and Wood (US 3,516,730)] and

further in view of Egan et al. (US 4,444,713) as applied to claims 1-5, 7 and 8 above, and further in view of Waitts (US 5,956,164) and Thompson (US 5,239,396).

The inclusion of a grating/embossment that displays 3-D or holographic features is also a well known extension of simple diffraction gratings (e.g. note cols. 1-2 of Waitts), and further is known to be a desirable aesthetic for tires/wheel assemblies (Thompson Figs. 2-3), inclusion of such to display a desired pattern/graphic being thus likewise obvious for only the expected results.

10. Note: In the 3-25-2004 IDS, JP 2001-53675 has been crossed off as no copy was received and further, it appears that the given number was wrong as a copy of the abstract only for JP 2000-153675 was received (this has been indicated on the 1449).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Geoffrey L. Knable  
Primary Examiner  
Art Unit 1733

G. Knable  
April 15, 2006